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(12) United States Patent Wang

(54) TRANSMISSION SYSTEM FOR AN ELECTRIC VEHICLE

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(57) ABSTRACT

A transmission system for an electric vehicle includes a gear-box which produces different rotation ratio between a drive motor and drive wheels during running of the electric vehicle, a differential which serves to absorb a power of the gearbox to overcome rotation speed difference between the drive wheels, and two wheel axles which are used to deliver the power to the drive wheels from the differential, the gearbox has a housing which is connected to a vehicle frame of the electric vehicle via a universal coupling. When the electric vehicle runs on a bumpy road and makes a turn, the vehicle frame is able to swing up and down and pivot left and right with respect to the gearbox housing, so as to reduce the bounce of the vehicle and dampen the centrifugal force caused tilt or roll of the vehicle, thus improving driving comfort and stability.

10 Claims, 4 Drawing Sheets

